

ABSTRACT

A high-pressure stripper rubber provides inserts and support members that cooperatively support the profile of the rubber against elastic deformation. The inserts dynamically cooperate to resist elastic deformation of the rubber due to down hole pressure. The stripper rubber has a generally cylindrical upper moiety and a dynamic, generally frusto-conical, lower moiety that cooperatively define a bore for receiving oilfield equipment. A generally ring-shaped adapter insert, at least partially within the stripper rubber, is disposed toward the upper moiety for attaching the stripper rubber to drilling head equipment. A structural retention insert assembly provides (1) one or more support members proximately and movably attached to the adapter insert, and (2) one or more structural retention inserts at least partially within the stripper rubber and distally attached to the one or more support members. The stripper rubber dynamically forms a self-actuating, fluid-tight seal around varying outer diameters of oil field equipment as the equipment is tripped through the stripper rubber bore with minimal deformation of the rubber, even under high pressure.